

10/549869  
20 Mar 05

Translation

PATENT COOPERATION TREATY  
PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>8586 WO GI-FRI</b>	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
International application No. <b>PCT/EP2004/002939</b>	International filing date (day/month/year) <b>20.03.2004</b>	Priority date (day/month/year) <b>26.03.2003</b>
International Patent Classification (IPC) or national classification and IPC		
Applicant <b>ZF FRIEDRICHSHAFEN AG</b>		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>6</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of <u>4</u> sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																									
<p>4. This report contains indications relating to the following items:</p> <table> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>		<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/002939

## Box No. I

## Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:

international search (Rule 12.3 and 23.1(b))  
 publication of the international application (Rule 12.4)  
 international preliminary examination (Rule 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):

the international application as originally filed/furnished  
 the description:

pages \_\_\_\_\_ as originally filed/furnished  
 pages\* 1-11 received by this Authority on 03.02.2005 with the letter of 03.02.2005  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

the claims:

nos. \_\_\_\_\_ as originally filed/furnished  
 nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19  
 nos.\* 1-7 received by this Authority on 14.04.2005 with the letter of 11.04.2005  
 nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

the drawings:

sheets \_\_\_\_\_ as originally filed/furnished  
 sheets\* 2/2 received by this Authority on 03.02.2005 with the letter of 03.02.2005  
 sheets\* 1/2 received by this Authority on 14.04.2005 with the letter of 11.04.2005

a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3.  The amendments have resulted in the cancellation of:

the description, pages \_\_\_\_\_  
 the claims, nos. \_\_\_\_\_  
 the drawings, sheets/figs \_\_\_\_\_  
 the sequence listing (specify): \_\_\_\_\_  
 any table(s) related to sequence listing (specify): \_\_\_\_\_

4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

the description, pages \_\_\_\_\_  
 the claims, nos. \_\_\_\_\_  
 the drawings, sheets/figs \_\_\_\_\_  
 the sequence listing (specify): \_\_\_\_\_  
 any table(s) related to sequence listing (specify): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/002939

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	
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## 1. Statement

Novelty (N)	Claims	YES
	Claims	1 - 7
Inventive step (IS)	Claims	YES
	Claims	1 - 7
Industrial applicability (IA)	Claims	YES
	Claims	1 - 7

## 2. Citations and explanations (Rule 70.7)

The claims newly filed with the letter of 11 April 2005 have been studied in detail and form the basis for the following objection:

## 1. Objection

Claim 1

The wording "the switching means (20, 32) not being mechanically actuatable" is not disclosed in the description. This wording thus contravenes PCT Article 6.

## 2. Document

Reference is made to the following document:

D1: EP-A-1 045 150 (SMC KK) 18 October 2000  
(2000-10-18)

## 3. Novelty/inventive step

Irrespective of the aforementioned objection, the

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

subject matter of **claim 1** is not novel (PCT Article 33(2)) and therefore the requirements of PCT Article 33(1) are not satisfied.

Document **D1** (fig. 3) discloses (the references between parentheses refer to that document) a switching valve with a valve housing (24, 26) that incorporates two inflow apertures (40a, 40c) and one outflow aperture (40b), and has an inner chamber that can be filled with a control pressure medium and contains switching means (28, 72) that can be moved between two switch positions, the switching means (28, 72), in each switch position, opening one of the inflow apertures of the valve housing (24) and closing the other inflow aperture, the switching means (28, 72) comprising two separate sealing means (32a, 32b), which in order to open and close two apertures (40a, 40c) in the valve housing (24) are arranged so as to be movable along designated circular arc-shaped sections approximately coaxially to said inflow apertures (40a, 40c), the switching means (28, 72) being arranged in the inner chamber of the valve housing (24, 26) so as to be freely pivotable about an axis of rotation or a tilting axis (70), the two separate sealing means (32a, 32b) of the switching means (28, 72) being connected via a connector piece, the switching means (28, 72) comprising two shaft extensions which point radially away from the connector piece and which are mounted in receiving apertures, preferable in blind holes, in the valve

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/002939

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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housing (26) (column 4, lines 41-48), two switch balls or switch flaps which point radially away from the connector piece being arranged substantially perpendicular to the axis of rotation (70) of the shaft extensions and the switch flaps comprising at least two upper sealing surfaces which are oriented substantially perpendicular to the axis of rotation (70) and substantially perpendicular to the longitudinal axis of the switching means (28, 72).

**Dependent claims 2-7** do not contain any features which, in combination with the features of any claim to which they refer, meet the PCT requirements for novelty and inventive step. The features of these claims are also known substantially from document D1 or from the other documents cited in the search report or are generally known to a person skilled in the art.

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

International application No.

PCT/EP2004/002939

**Box No. VIII      Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

See Box V